**VAMSI VARMA**

AWS/DevOps Engineer

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**PROFESSIONAL SUMMARY:**

* Around 8 years of experience in automating, configuring and deploying instances in the areas of Data Center Operations, **Systems Administration**, **Cloud computing**, Software Configuration Management (**SCM**).
* Highly experienced in **AWS** Cloud platform and its features which includes **EC2**, **VPC**, **EBS**, **AMI**, **RDS**, **ELB,VPC**, **Cloud Watch**, **Cloud Trail**, **Cloud Formation template(CFT),Security Groups**, Auto scaling, Cloud Front, **IAM**, **S3**, and **Route53.**
* Creating **Snapshots** and **Amazon machine images** (**AMIs**) of the instances for backup and creating **clone instances**.
* Performed configuration, deployment and support of cloud services.
* Design **high availability** (**HA**) applications on AWS across **Availability Zones** and **Availability Regions**.
* Experienced in Installation, Configuration and Administration of **Windows, Red Hat Linux, Cent OS** and **VMware Environments**.
* Expertise in **Amazon AWS Cloud Administration** which includes services**: EC2, S3, EBS, VPC, ELB, Route 53, Auto Scaling, Security Groups, Redshift** and **Cloud Formation**
* Utilized **Cloud Watch** to monitor resources such as **EC2**, **CPU memory**, **Amazon RDS services**, **EBS** volumes, to set alarms for notification or automated actions and to monitorlogs for a better understanding and operation of atomic the system.
* Experience in deploying and monitoring applications on various platforms using **Elastic Bean Stalk**.
* Development of automation of **Kubernetes clusters** with [**Ansible**](https://github.com/CaptTofu/kubernetes-master)**.**
* Devops experience with **Puppet, Chef, Ansible, Salt, AWS (OPS Work)** and **Open Stack**.
* Configured and monitored distributed and multi-platform servers using **chef**.
* Defined **Chef Server** and workstation to manage and **configure nodes**.
* Skilled in using both **PowerShell** and **Python** for scripting **AWS** remotely
* Knowledge on **estimating costs,SNS** and **SQS.**
* Designed end to end automation of infrastructure and continuous delivery of the applications by integrating cloud formation **scripts, Jenkins, AWS and CHEF cookbooks** and **recipes**.
* Knowledge on **IPNetworkingVPN’s**, **DNS**, **load balancing.**
* Developed **Chef Cookbooks** and Recipes to manage **systems configuration**.
* Experience in **branching, tagging** and **maintaining** the version across the environments working on Software Configuration Management (**SCM)** tools like **Subversion (SVN) and GIT**.
* Good knowledge in **CI** (Continuous Integration) and **CD** (Continuous Deployment) methodologies. Installed and Managed **Jenkins** and **Nexus** for **CI** and Sharing Artifacts respectively within the company.
* Experience in using **NexusRepository** Managers for **Maven** builds.
* Has experience on Virtualization technologies like **VMware** and **Vagrant**.
* Extensively experienced in using **Build** Automation tools like **ANT, Maven, Gradle** and working knowledge on other build tools like make file.
* Created and wrote shell scripts (**kasha, Bash**), **Ruby, Python** and **PowerShell** for setting up **baselines**, **branching**, **merging**, and automation processes across the environments using **SCM** tools like **GIT**, **Subversion (SVN), Stash and TFS** on **Linux** and **windows** platforms.
* Experience with **MongoDB, MSSQL, MySQL** and **Server DB** Tasks.
* Strong ability to troubleshoot any issues generated while building, deploying and in production support.

**TECHNICAL SKILLS**

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| --- | --- |
| **Cloud Platform** | **AWS, Microsoft Azure, and Open stack.** |
| **Configuration Management** | **Chef, Puppet, Vagrant, Salt, Maven, Ansible, Docker, Gradle, Splunk, OPS Work.** |
| **Database** | **SQL: Oracle, DB2, MySQL, SQL Server, MS SQL** |
| **Build Tools** | **ANT, MAVEN, Make file, Hudson, Jenkins, BAMBOO, Code Deploy.** |
| **Version Control Tools** | **Subversion (SVN), Clear case, GIT, GIT Hub, Perforce, Code Commit.** |
| **Web/Application Servers** | **Apache Tomcat, Web Sphere, Nix, JBOSS, Web Logic, IBM WAS.** |
| **Languages/Scripts** | **C, Java, HTML, Shell, Bash, PHP, Python, PHP, Ruby and Perl.** |
| **SDLC** | **Agile, Scrum.** |
| **Web Technologies.** | **HTML, CSS, Java Script, JQuery, Bootstrap, XML, JSON, XSD, XSL, XPATH.** |
| **Operating Systems** | **Red hat, Ubuntu, Linux and WINDOWS, CentOS, SUSE.** |
| **Network Protocols** | **SMTP, SNMP, ICMP, TCP/IP, FTP, TELNET, UDPandRIP, ISCSI, Fiber Channel.** |
| **Domain Functional Knowledge** | **Infrastructure Domain**  **Utilities Domain**  **Cloud Computing Domain** |

**PROFESSIONALEXPERIENCE**

**Capital one, Plano, TX. June 2016 - Still Date**

**Aws Cloud Engineer.**

Capital One is the eighth-largest bank holding company in the United States when ranked by assets and deposits.Capital One Financial is an American bank holding company specializing in Credit card, home loans, and auto loans, banking and saving products. Capital One is a diversified bank that offers a broad array of financial products and services to consumers, small business and commercial clients. Capital one has a widely recognized brand in America. As one of the nation’s top 10 largest banks based on deposits, Capital one serves banking customers through branch locations primarily in Virginia, Texas, New York, Louisiana, Maryland and District of Columbia.

**Responsibilities**:

* Created a highly-scalable, distributed system for running Web applications and Web services by working with architects and developers and ensuring the implementation of RESTful Web services and API design.
* Planned, designed and implemented a backup and disaster recovery program.
* Used Amazon IAM service to grant permission to assigned users and manage their roles
* Developed strategy for cloud/virtualization migration and implementation best practices.
* Designed AWS Cloud Formation templates to create custom sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates.
* Setup and build AWS infrastructure various resources, VPC EC2, S3, IAM, EBS, Security Group, Auto Scaling, and RDS in Cloud Formation JSON templates.
* Create the stack using Cloud Formation Template to launch multiple Instances.
* Defined AWS Security Groups which acted as virtual firewalls that controlled the traffic allowed to reach one or more AWS EC2 instances.
* Creating Security groups for both individual instances and for group of instances under a network.
* Included security groups, network ACLs, Internet Gateways, and Elastic IP's to ensure a safe area for organization in AWS public cloud.
* Creating S3 buckets and managing policies for S3 buckets and Utilized S3 bucket and backup on AWS.
* Built S3 buckets and managed policies for S3 buckets and used S3 bucket and Glacier for storage and backup on AWS.
* Created alarms and notifications for EC2 hosts using Cloud Watch.
* Used Amazon RDS which includes automatic failover and high availability at the database layer for MySQL workloads.
* Architected and implemented location event processing and storage using AWS Lambda, Dynamo DB, and RDS Postgres.
* Detected unauthorized usage on Amazon Web Services using AWS Lambda, AWS CloudTrail
* Well experienced in provisioning machines/instances in a fly with Cloud Formation, Autoscaling, VMware templates, clones, AWS snapshots.
* Creating snapshots and amazon machine images (AMIs) of the instances for backup and creating clone instances.
* Experience in designing and deploying AWS Solutions using EC2, S3, EBS, Elastic Load balancer (ELB), auto scaling groups.
* Work closely with application teams in supporting application migrations to Cloud.
* Implementing monitoring solutions on the AWS using cloud formation and Chef
* Responsible for end-to-end public Cloud Automation of application delivery, including Infrastructure provisioning and integration withContinuous Integration/Continuous Development (CI/CD) platforms, using existing and emerging technologies.
* Designed with frontend coding using AWS Lambda and S3 to create a server-less architecture.
* Using GIT version control tools for developing multiple applications on Source codes repository.
* Used GIT for branching, tagging, and merging.
* Implementing monitoring solutions on the AWS using cloud formation and Chef

**Sysmex Corporation, Lincolnshire, IL. Jan2016-June 2016**

**AWS Engineer.**

Sysmex Corporation is engaged in the health care business.Sysmex is involved in the development, manufacture and sale of laboratory testing reagents and laboratory equipment; the development and sale of computer systems for medical institutions, as well as the development and sale of software used for clinical examination information systems

**Responsibilities**:

* Implemented and maintained monitoring and alerting of production and corporate servers

Such as EC2 and storage such as S3 buckets using AWS Cloud Watch.

* AWS data backup (snapshot, AMI creation) techniques, along with data-at-rest security within AWS.
* Redis deployment, monitoring, replication, disaster recovery.
* Involved in automated deployment of EC2 instances in data centers and availability zones.
* Used security groups to develop a logical firewall to ensure high security for controlapplications.
* Used Amazon IAM to grant fine access of AWS resources to users. Also, managed roles and permissions of users to AWS account through IAM.
* Manage amazon redshift clusters such as launching the cluster and specifying the node type as well.
* Used AWS Bean Stalk for deploying and scaling web applications and services developed with Java, PHP, Node.js, Python, Ruby, and Docker on familiar servers such as Apache, and IIS.
* Created financial modeling simulations, streaming solutions, natural language processing

(NLP) pipelines and recommendation engines on Spark clusters, deploying them on AWS on

YARN and Mesos.

* Used Cloud Front to deliver content from AWS edge locations to users, allowing for further reduction of load on front-end servers.
* Expertise in NOSQL database Mongo DB. Expertise in designing Mongo DB collections, Indexes, setting up MongoDB cluster and shards, developing Mongo DB applications using native Java
* Set up Auto Scaling Groups based on memory and CPU to adapt to unforeseen spikeswithout having an outage or needing manual intervention.
* Used SQL, Amazon Redshift, S3, EC2,Python, Java, and Amazon Cloud
* Set up Elastic Load Balancers for different applications to ensure high availability ofapplications.
* Changed the AWS infrastructure Elastic Beanstalk to Docker with Kubernetes to provide better performance and easier management of the production environment.
* Evaluated Mesos/Marathon and Kubernetes for Docker container orchestration.
* Used Amazon S3 to backup database instances periodically to save snapshots of data.
* Used Jenkins, Mesos, Marathon, Docker and Elasticsearch to glue most of the parts of your systems.
* Used Amazon Route53 to manage DNS zones and also give public DNS names to elastic load balancers ip’s.
* Used Cloud Watch logs to move application logs to S3 and create alarms raised byapplications.
* Configured an AWS Virtual Private Cloud (VPC) and Data Base subnet group for isolation ofresources within AWS RDS.
* Used Amazon RDS Multi-AZ for automatic failover and high availability at the database tierfor MYSQL workloads.
* Configured S3 Versioning and Life Cycle Policies to backup files and archive files in Glacier.
* Redefined Sensu monitoring system to scale better across multiple datacenters.
* Presented on View Object pattern in Web Application Automation, Ruby, Rake, Powershell,

Selenium, Team City.

* To design high availability applications on AWS across Availability Zones and availabilityregions.
* Developed and supported the Red Hat Enterprise Linux based infrastructure in the cloudenvironment.
* Supported highly complex customer problems that spanned multiple AWS services including RedShift, EC2, CloudFormation, VPC, ElasticCache and RDS
* Worked with Chef in AWS Cloud environment.
* Created SNS to enable notifications for developers.
* Involved in creating and configuring profiles, clusters, nodes, node agents for WebSphere Application Server.
* Installed, configured and managed Puppet Master and Agent.
* Used and MAVEN as a build tools on java projects for the development of build artifacts on the source code.
* Written CHEF cookbooks for various configurations to modularize and optimize end productconfiguration.
* Scripting using Windows PowerShell 3.0 to automate backup in servers
* Installed workstation, bootstrapped nodes, wrote recipes, cookbooks, roles andenvironments and uploaded them to chef server.
* Configured and administered Jenkins for continuous integration and deployment intoTomcat Application Server and to improve reusability for building pipelines.

**Emblem Health,Manhattan, NY. Apr 2014-Dec 2015**

**Build/Release Engineer**

EmblemHealth is one of the nation's largest nonprofit health plans.Emblem health care provide New York’s working families with access to medical services regardless of cost. This new health care model – built around a network of participating providers.

**Responsibilities**:

* Automate infrastructure in AWS using Amazon Web Services. Deploy puppet to completely provision andmanage AWS EC2 instances, volumes, DNS, and S3.
* Created S3 backups using versioning enable and moved objects to Amazon Glacier for archiving purpose.
* Experience in configuring, monitoring distributed and multiple platform servers using Puppet.
* Expertise in using Puppet Dashboard and Puppet DB for configuration management to existinginfrastructure.
* Used standard skeleton structures like Skel-minimal, Skel-standard to write puppet code. Automated thecore module Puppet-limits using puppet, and to automate the entire environment.
* Worked with Java libraries to access AWS facilities as Simple Storage Service (S3), Simple Queue Service (SQS) and SimpleDB.
* Wrote PowerShell scripts for user management.
* Production experience in large environments using configuration management tool Puppet supporting with500+ servers and involved in developing manifests.
* Develop, test, and maintain a disaster recovery plan for critical VMs and application data.
* Virtualized the servers using the Docker for the test environments and dev-environment needs.
* Automated the tasks using Chef and Ansible.
* Configuration Automation using Puppet and Docker Containers.
* Troubleshoot issues related to AWS, Linux, Java, and deployment processes
* Built and Deployed Java/J2EE to a web application server in an Agile continuous integration environmentand also automated the whole process.
* Launching and configuring of Amazon EC2(AWS) Cloud Servers using AMI’s (Linux/Ubuntu) andconfiguring the servers for specified applications.
* Redefined monitoring systems from ground up using open source technologies such as Sensu, Logstash and Graphite.
* Created continuous integration system using SVN, ANT, Ansible, Jenkins, Chef, Salt, Puppet full automation
* Increased platform security by setting up Git access controls with Gitolite and later Gerrit Code Review System.
* Integrated Build Process through Jenkins to various SCM tools like GitHub, SVN.
* Developed with Gerrit code review and GIT.
* Created custom Mesos framework for running distributed backtests and other cpu/io intensive tasks.
* Perform daily system monitoring, verifying the integrity and availability of all hardware, server resources,systems and key processes, reviewing system and application logs, and verifying completion of scheduledjobs such as backups.
* Build application and database servers using AWS EC2 and create AMIs as well as use RDS for OracleDB.
* Managed and monitored the server and network infrastructure using Nagios and Splunkthoroughly.
* Identifying a specific subject or event type for publishing messages and allowing clients to subscribe for notifications (SNS).
* Written shell scripts for automating logs backup and archiving.
* Logs file analysis (troubleshooting) to resolve issues using scripts.
* Developed automation scripting in Python (core) using Puppet to deploy and manage Java applications across Linux servers
* Manage VMware Infrastructure clusters on Production Test/Development environments.
* Experience working with VMWare tools like vCenter and vSphere to manage VM’s running on ESX clusternodes and also experience working vMotion.
* Provide responsive off-hours support in a 24 / 7 environment and ensure maximum availability

of all servers and applications.

* Increased security, stability, and recoverability of the corporate network through implementation and ownership of all IT policies including security, backup, disaster recovery planning and compliance.

**Environment:** VMware, AWS, Jenkins, Apache, Java, Nginx, Docker, GitHub, SVN, Puppet, Chef, Oracle Db and Nagios.

**Direct TV, El Segundo, CA July 2013 – Mar 2014  
Jr. AWS DevOps Engineer**  
DirecTV is one of the lead in the media sector offering different types of services to customers. We are a team of 5 working on different applications which will help customers for easy interaction with DirecTV

**Responsibilities:**

• Experience in designing and deploying AWS Solutions using EC2, S3, EBS, Elastic Load balancer (ELB) auto scaling groups.

•AWS migration from on-prem servers to AWS servers including all java applications and configurations.

• Responsible for Design and architecture of different Release Environments for new projects.

• Worked at optimizing volumes and EC2 instances and created multiple VPC instances.

• Writing Maven and Ant scripts for application layer modules.

• Implementing new projects builds framework using Jenkins &amp; maven as build framework tools.

• Setup and build AWS infrastructure various resources, VPC EC2, S3, IAM, EBS, Security Group, Auto Scaling, and RDS in Cloud Formation JSON templates.

• Designed AWS Cloud Formation templates to create custom sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates.

• Implementing a Continuous Delivery framework using Jenkins, Chef, Maven &amp; Nexus as tools.

• Experience involving configuring S3 versioning and lifecycle policies to and backup files and archive files in glacier.

•Utilize Amazon Glacier for archiving data.  
• Developed Scripts for AWS Orchestration.  
• System monitoring with Nagios &amp; Graphite.  
• Installed, configured and maintained web servers like HTTP Web Server, Apache Web Server and aix Application Server on Red Hat Linux.  
• Business data analysis using Big Data tools like Splunk, ELK.  
• Experience in CI and CD with Jenkins.  
• Used Puppet server and workstation to manage and configure nodes.  
• Experience in writing Puppet manifests to automate configuration of a broad range of services.  
• Prepared projects, dashboards, reports and questions for all JIRA related services.  
• Generated scripts for effective integration of JIRA applications with other tools.  
• Coordinate/assist developers with establishing and applying appropriate branching, labeling/naming conventions using Subversion (SVN) and Git source control.  
• Defining Release Process &amp; Policy for projects early in SDLC.  
• Branching and merging code lines in the GIT and resolved all the conflicts raised during the merges.  
• Designed highly available, cost effective and fault tolerant systems using multiple EC2  
instances, Auto Scaling, Elastic Load Balance and AMIs.  
• Highly skilled in the usage of data center automation and configuration management tool such as Docker.  
• Perform Deployment of Release to various QA &amp; UAT environments.  
• Responsible for installation and upgrade of patches and packages on RHEL 5/6 using  
RPM & YUM.  
• Supporting different projects build &amp; Release SCM effort e.g. branching, tagging, merge,  
etc.

**Environment**: Jenkins, Python, EC2, RDS, EBS, Nagios, S3, VPC, AMI, Cloud Watch, Security Groups, IAM, Dynamo DB tables, Linux, Solaris.

**UNICEL Technologies, Bangalore, India Sept 2010 - Nov 2012  
Linux System Administrator**  
  
UNICEL Technologies, based in Bangalore and founded in 2003, provides Integrated Cloud Communications Solutions across SMS, Voice, and Email. The strong and intensifying belief in the power of cloud communications, along with the need for Innovation to provide these services in a uniquely simple and integrated way, is what the company thrives on every day. Unicel provides a complete range of communications services through APIs that customers can directly integrate into their applications, SaaS based applications built by Unicel to meet many common business requirements, and customized solutions tailor made to business specific needs.

**Responsibilities:**  
• Installation of patches and packages using RPM and YUM in Red hat Linux.  
• Created and modified application related objects, created Profiles, users, roles and maintained system  
security.  
•Responsible for setting up cron jobs scripts on production servers.  
• Installed and configured SAMBA server for Windows and Linux connectivity.  
• Monitored System Activities like CPU, Memory, Disk and Swap space usage to avoid any performance  
issues.  
• Responsible for writing/modifying scripts using bash, ksh, and bash for day-to- day administration.  
• Modified Kernel parameters to improve the server performance in Linux.  
• Creation of Logical volumes (LVM) for Linux operating systems.  
• Installed and configured Apache / Tomcat web server.  
• Involved in design, configuration, installation, implementation, management, maintain and support for  
the Corporate Linux servers RHEL 4x, 5.x, CENTOS 5.x.  
• Coordinating with 24 x 7 on-call support personnel in debugging.  
• Maintained proper documentation of all the activities carried out during the project.  
• Worked with DBA team for database performance issues, network related issues on Linux Servers.  
• Maintained proper documentation of all the activities carried out during the project.  
• Created and modified users and groups with SUDO permission.  
• Installed and configured VNC server/client.  
• Coordinating users for any server activities which may involve major changes on software or any hardware related issues.

**Environment**: Red Hat Linux (RHEL 4/5), Logical Volume Manager, Global File System, Red Hat Cluster Servers, Oracle, MySQL, DNS, NIS, NFS, Apache, Tomcat.

**HDFC, Hyderabad, India Mar 2009-Aug 2010  
UNIX System Administrator**The Housing Development Finance Corporation Limited (HDFC) was amongst the first to receive an in-principle approval from the Reserve Bank of India (RBI) to set up a bank in the private sector, as part of RBI’s liberalization of the Indian Banking Industry in 1994. The bank was incorporated in August 1994 in the name of ‘HDFC Bank Limited’, with its registered office in Mumbai, India. HDFC Bank commenced operation as a Scheduled Commercial Bank in January 1995.

**Responsibilities:**

• Managed and carried out system maintenance, hardware replacements and upgrades. Performed system patch and software analysis, installs and configuration.

• Installed and Configured RHEL 3/4/5 on Intel and AMD hardware  
• Participated in upgrading and migrating to newer versions.

• Perform Linux Kernel tuning for web, database and application servers.  
• Installed and configured Apache Web server and integrated with Web Logic server […]  
• Writing shell scripts for Automated Back- ups and Cron Jobs using ksh and bash.  
• Managed user accounts and groups for corporate Linux users.  
• Managed and support corporate Linux Development servers.  
• Responsible for OS installs, system configuration and upgrades.  
• Manage and perform change control and administration on application servers, web servers, and database servers in company’s mission critical production, staging and development environments.

**Environmen**t: Rhel 3/4/5, Oracle, db2web, Apache.